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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,638	07/01/2003	Thomas Wulff	1571/SYMBP161US	1383
23623 7590 01/29/2007 AMIN, TUROCY & CALVIN, LLP 1900 EAST 9TH STREET, NATIONAL CITY CENTER 24TH FLOOR, CLEVELAND, OH 44114			EXAMINER TRUJILLO, JAMES K	
			ART UNIT 2116	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/611,638

Applicant(s)

WULFF, THOMAS

Examiner

James K. Trujillo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 20-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment dated 11/21/06.

5

Election/Restrictions

2. Newly submitted claim 20-36 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

I. Claim 1-4 and 6-19, drawn to shutdown of a computer program, classified in class 713, subclass 324.

10 II. Claim 20-36, drawn to a latching mechanism for a battery, classified in class 320, subclass 112.

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination (invention I) as claimed does not require the particulars of the subcombination (invention II) as claimed for patentability, and
15 (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because a different latching. The subcombination has separate utility such as securely latching a battery without requiring power control.

The examiner has required restriction between combination and subcombination
20 inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104.

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See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

5 The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or
10 divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

 Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution
15 on the merits. Accordingly, claim 20-36 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. Claims 1-4 and 6-19 are presented for examination.

Drawings

20 4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the details of the first and second

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latching mechanisms must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specifically, the drawings provided do not show the details either because drawing do not actually show the claimed details or that the drawings are not of good quality (drawing contrast is of poor quality in figures 2 and 3) to show the claimed details.

20

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, support for Applicant's amendment does appear to show support in the specification for the claim limitation of "the first latch mechanism engages the second latch mechanism to prevent further removal of the battery..." in claim 1, 11, 14, 15 and 19. It is not clear from reading the specification, which is the first latch and second latch. The reference to the drawings are not helpful because the drawings are not clear.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 1, 2, 4, 6, 8, 9, 11-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, U.S. Patent 6,225,777 in view of Fischl et al., U.S. Patent 5,293,109.
9. Regarding claim 1, Garcia teaches a system for controllably releasing a power supply comprising:

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a. a host device that employs a computer program while powered by a battery (computer program inherently runs while powered by a battery in device such as a portable computer in an operating mode, figures 1-8 and col. 2, lines 26-39);

b. a retaining assembly operatively coupled to the host unit for accepting the battery (18, 14, 13 and 3, figure 1);

c. wherein the battery (cover 1 and tray 2, col. 3, lines 11-24 and figure 1) comprises a first latch mechanism and a second latch mechanism to delay release of the battery (wherein the first member having a catch is a first latch mechanism and wherein the second member has a notch and lateral catches, col. 2, lines 40-52), wherein upon release of the first latch mechanism, the first latch mechanism engages the second latch mechanism for the removal of the battery (first catch of the first member engages the notch of the second member, col. 2, lines 45 through col. 3, line 10), and upon release of the second latch mechanism, the second latch mechanism is disengaged, completely releasing the battery (cover and tray may be removed together, col. 2, lines 45 through col. 3, line 10; cover and tray are removed together, col. 4, lines 27-56).

Garcia does not explicitly disclose wherein the retaining assembly adapted to delay the release of the battery from the host device unit at least a shut down of the computer nor when the first latch engages the second latch is to prevent further removal of the battery.

Fischl teaches a system for controllably releasing a power supply, comprising:

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a host device (10) that employs a computer program while power by a battery (processing means recognizing that power source is either about to be disconnected or connected, col. 2, lines 46-56); and;

a retaining assembly (inherent in order for battery 12 to be engaged to host device 10, figure 1) operatively coupled to the host unit for accepting the battery, the retaining assembly adapted to release the battery from the host device until at least a shutdown of the computer program (allowing for an appropriate shutdown, col. 3, lines 39-45);

a first latch mechanism (latch 16 including 14, 18, 19 and 20 figure 1) that engages a second latch mechanism (latch 17 including) to prevent further removal of a battery and upon release of the second latch mechanism, the second latch mechanism is disengaged, completely releasing the battery (col. 2, lines 21-56, figure 1).

Fischl is in the same field of endeavor as that of Garcia in that both are directed toward a device using latches to remove a battery, also both in classified in the same area. Fischl further provides the advantage of the allowing time for an appropriate shut down or power up of the device (col. 1, lines 21-25, col. 2, lines 46-56 and col. 3, lines 39-45).

It would have been obvious to one of ordinary skill in the art, having the teachings of Garcia and Fischl before them at the time the invention was made to modify the contacts and/or latches of Garcia to delay the removal of the battery in a manner as taught by Fischl.

One of ordinary skill in the art would have been motivated to make this modification in order to achieve the advantage of the allowing time for an appropriate shut down or power up of the device in view of Fischl.

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10. Regarding claim 2, Garcia together with Fischl taught the system according to claim 1, as described above. Fischl further teaches the retaining assembly adapted to release the battery after the shutdown of the computer program (allowing the product time for an appropriate shutdown, col. 3, lines 34-45).

5 11. Regarding claim 4, Fischl taught the system according to claim 1, as described above. Fischl further teaches wherein the computer program is an application program for the host unit (invention of Fischl is directed toward any kind of electronic device including a computer having settings and information stored on a RAM and having processing means suggests an application program, col. 1, lines 12-28 and col. 2, lines 46-56).

10 12. Regarding claim 6, Garcia together with Fischl taught the system according to claim 1, as described above. Garcia further teaches wherein the host device is at least one of portable scanner and a computer (the invention of Garcia may be applied to other portable electronic devices including a portable computer, col. 2, lines 26-39). Fischl also teaches wherein the host device is at least one of portable scanner and a computer (col. 1, lines 12-18).

15 13. Regarding claim 8, Garcia together with Fischl taught the system according to claim 1, as described above. Fischl further teaches comprising an artificial intelligence for providing a stimulus to the retaining assembly (contacts 32, 34, 36 and 38 that are detected by a processing device, col. 2, lines 51-57 and col. 3, lines 10-45).

14. Regarding claim 9, Garcia together with Fischl taught the system according to claim 1, as
20 described above. Fischl further teaches comprising an automatic shut down mechanism as to initiate a shut down of the host device (allowing the product time for an appropriate shutdown, col. 3, lines 39-45).

15. Regarding claim 11, Garcia teaches a battery release mechanism, comprising:

a. a battery receiving compartment being part of a host unit that runs a computer program (18, 14, 13 and 3, figure 1);

5 b. a first battery latch or catch structure (lateral catch 6, col. 4, lines 43) operatively connected to the battery receiving compartment (first catch of the first member engages the notch of the second member, col. 2, lines 45 through col. 3, line 10 and col. 4, lines 42-55); and

c. a second battery latch or catch structure (lateral catch 8) that employs a notch

10 mounted on a strip (figure 3), wherein the notch engages with an edge of the host unit to create a reactive force (providing resistance, col. 4, lines 46-49) that acts in a direction opposite to a sliding direction of the battery, by pressing a disc shaped area on the strip (figure 3), the strip moves downward and lowers the notch from its engaged position allowing the battery to slide out from the battery receiving compartment (tray and cover
15 are removed as a whole, col. 4, lines 42-55).

Garcia does not explicitly disclose wherein the battery receiving compartment is adapted to delay release of a battery until on or after a shutdown of a computer program.

Fischl teaches the wherein a retaining assembly adapted to delay the release of the battery
20 from the host device until at least a shut down of the computer program (col. 1, lines 21-25, col. 2, lines 46-56 and col. 3, lines 39-45). Fischl is in the same field of endeavor as that of Garcia in that both are directed toward the removal of a power supply from an electronic device. Fischl

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further provides the advantage of preventing loss of data on an inadvertent removal of a battery by providing time for an appropriate shutdown (col. 1, lines 21-25, col. 2, lines 46-56 and col. 3, lines 39-45).

16. Regarding claim 12, Garcia together with Fischl taught the battery release mechanism according to claim 11, as described above. Garcia further teaches wherein the first catch or latch structure comprises a notch being engaged with a side of the release mechanism (figures 1, 2, col. 3, lines 39-50, and col. 4, lines 42-56).

17. Regarding claim 13, Garcia together with Fischl taught the battery release mechanism according to claim 11, as described above. Garcia further teaches wherein the first and second catch or latch mechanisms release the battery in two stages (col. 4, lines 42-56).

18. Regarding claim 14, Garcia together with Fischl taught the claimed battery release mechanism therefore together they also teach the claimed method.

19. Regarding claim 15, Garcia teaches a method for controllably releasing a power supply from a host unit comprising:

- a. providing a host device (electronic device 3, figures 1 and 2) with a logic unit and a power supply retaining assembly (back of electronic device, figures 1 and 2);
- b. providing a first latch mechanism (lateral catch 6) and a second latch mechanism (lateral catch 8) to release a battery, wherein upon releases of the first latch mechanism, first latch mechanism engages the second latch mechanism, and upon release of the second latch mechanism, the second latch mechanism is disengaged, completely releasing the battery (col. 4, lines 41-56).

Garcia does not explicitly disclose initiating a power off for the host device; sending a stimulus from the logic unit to the power supply retaining assembly for initiating release of the battery; and delaying the release of the battery until at least a shut down of a computer program
5 associated with the host device and wherein the first latch mechanism engages the second latch mechanism to prevent further removal of the battery.

Fischl teaches method for controllably releasing a power supply from a host unit comprising:

initiating a powering off for the host device (contacts being broken, col. 3, lines 21-45);

10 sending a stimulus from the logic unit to the power supply retaining assembly for initiating release of the power supply (contacts being broken are detected, col. 2, lines 21-45);

delaying a release of the power supply until at least a shut down of a computer program associated with the host device (col. 6, lines 30-36);

15 and wherein the first latch mechanism engages the second latch mechanism to prevent further removal of the battery (mechanical stop hitting a latch, col. 2, lines 21-45).

For the same reason set forth hereinabove it would have been obvious to modify Garcia with the teachings of Fischl.

20. Regarding claim 16, Garcia together with Fischl taught the method according to claim 15,
20 as described above. Fischl further teaches sending the stimulus prior to initiating the power off for the host (the breaking of contacts causes the initiation of the power off, col. 3, lines 21-45).

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21. Regarding claim 17, Garcia together with Fischl taught the method according to claim 15, as described above. Fischl further teaches comprising ejecting the power supply from the retaining assembly via an actuator (wherein the actuator is interpreted to be the second latch, figure 1).

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22. Claims 3 and 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, U.S. Patent 6,225,777 and Fischl in further view of Tsurumaru (cited in previous office action).

23. Regarding claim 3, Garcia together with Fischl teaches the system according to claim 1, as described above. Garcia and Fischl do not explicitly disclose wherein the retaining assembly
10 is adapted to release the battery without cold boot and loss of data associated with associated with the host unit.

Tsurumaru further teaches wherein the retaining assembly adapted to release the power supply without cold boot and loss of data associated with the host unit (entering a resume operation and data is saved and prevented from being destroyed, col. 8, lines 19-28). Tsurumaru
15 is in the same field of endeavor as that of Garcia in that both are directed toward the removal of a power supply from an electronic device. Tsurumaru further provides the advantage of preventing loss of data on an inadvertent removal of a battery (col. 1, lines 41-51).

It would have been obvious to one of ordinary skill in the art, having the teachings of Garcia, Fischl and Tsurumaru before them at the time the invention was made to modify the
20 latches and retaining assembly of Garcia to include delaying the release as taught by Tsurumaru.

One of ordinary skill in the art would have been motivated to make this modification in order to prevent loss of data in critical operations in view of Tsurumaru.

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24. Regarding claim 7, Garcia together with Fischl teaches the system according to claim 1, as described above. Garcia and Fischl do not explicitly disclose wherein the retaining assembly comprises at least one of an actuator and a solenoid.

Tsurumaru further teaches wherein the retaining assembly comprises at least one of an
5 actuator and a solenoid (wherein switch 30 is interpreted to be an actuator, col. 7, lines 9-14 and figure 5d).

For the same reason as set forth herein above it would have been obvious to one of ordinary skill in the art to combine the teachings of Tsurumaru with Garcia and Fischl.

10 25. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, U.S. Patent 6,225,777 and Fischl in further view of Flanigan, U.S. Patent 6,587,951 (cited in previous action).

26. Regarding claim 10 Garcia together with Fischl taught the system according to claim 1, as described above. Garcia further teaches comprising a release assembly for releasing the
15 removable power supply (figure 1) and Fischl further teaches comprising a release assembly for releasing the removable power supply (figure 1). Garcia and Fischl do not explicitly disclose wherein the release assembly comprises an emergency release since it requires the system to change state to a shut down of the computer program ("resume state").

Flanigan teaches method to enter a shut down state in an emergency (wherein an
20 emergency is interpreted to be when the system is locked, and the "resume" is where the computer system is shut down, col. 2, lines 5-8). Flanigan provides the advantage of shutting down the system when the system fails to respond (col. 2, lines 11-17).

It would have been obvious to one of ordinary skill in the art, having the teachings of Garcia, Fischl and Flanigan before them at the time the invention was made to modify the system of Garcia to include entering a shut down state in an emergency as taught by Flanigan.

One of ordinary skill in the art would have been motivated to make this modification in order to shut down the system when the system fails to respond. This would allow the power supply of Garcia to be removed when the shut down cannot be entered because the system fails to respond to a "resume" interrupt.

27. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia and Fischl in further view of Spears et al., U.S. Patent 6,304,981.

28. Regarding claim 18, Garcia together with Fischl taught the method according to claim 15, as described above. Garcia and Fischl does not explicitly disclose further comprising estimating via a logic unit a time for shut down of the computer program from powering off for the host device.

Spears teaches a system comprising estimating via a logic unit a time for shut down of the computer program from powering off for the host device (figure 7). Spears further teaches that it is advantageous to provide a system that determines the time required to reach a safe shut down to prevent a catastrophic loss of data so that an appropriate time may be set to allow proper shut down (col. 1, lines 24-40).

It would have been obvious to one of ordinary skill in the art, having the teachings of Garcia, Fischl and Spears before them at the time the invention was made to modify the system of Garcia to include estimation of time for shut down as taught by Spears.

One of ordinary skill in the art would have been motivated to make this modification in order to provide an appropriate time for a proper shut down in view of Spears.

Response to Arguments

- 5 29. Applicant's arguments with respect to claim have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's
10 disclosure.

U.S. Pat. No. 5,401, 592 to Gilpin et al., teaches a device having a first and second latch for securing and protecting a removable battery pack.

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this
15 Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).
Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after
20 the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (571) 272-3677.

5 The examiner can normally be reached on M-F (8:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on (571) 272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent
10 Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would
15 like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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James K. Trujillo
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